SCO	**M1: Demonstrate an understanding of the Système International (SI) by: describing the relationships of the units for length, area, volume, capacity, mass and temperature.** [C, CN, ME, V]

ACHIEVEMENT INDICATORS

- Explain how the SI system was developed, and explain its relationship to base ten.
- Identify the base units of measurement in the SI system, and determine the relationship among the related units of each type of measurement.
- Identify contexts that involve the SI system.
- Match the prefixes used for SI units of measurement with the powers of ten.
- Explain, using examples, how and why decimals are used in the SI system.
- Write a given measurement expressed in one SI unit, in another SI unit.

Monday, April 23

*If you did not write your test on Thursday or pass in your assignment you need to come see me asap.

Today:
-We're starting a new unit (Measurement)
-We will look at the system of measurement and at some conversions
-Notes/Practice questions

Systems of Measurement

- In Canada, we use two systems of measurement: System International and the Imperial System. We use SI (metric) most often in our daily lives, but the imperial system is used in many trades.

The metric system was formally developed by France in the 1700's. The system is based on the linear measure of a metre which was defined in terms of the Earth's circumference, and on base 10. Mass was based on the gram, defined as the mass of one cubic centimetre of water.

In Canada in the 1970's, with rapidly advancing technology and expanding worldwide trade, the Canadian government adopted a policy for a single, coherent measurement system based on the Système International d'Unités (SI), the latest evolution of the metric system.

- In the SI, the base unit for measuring length is the metre (m) and the base unit for measuring volume is the litre (l). For measuring mass, the base unit is the gram (g).

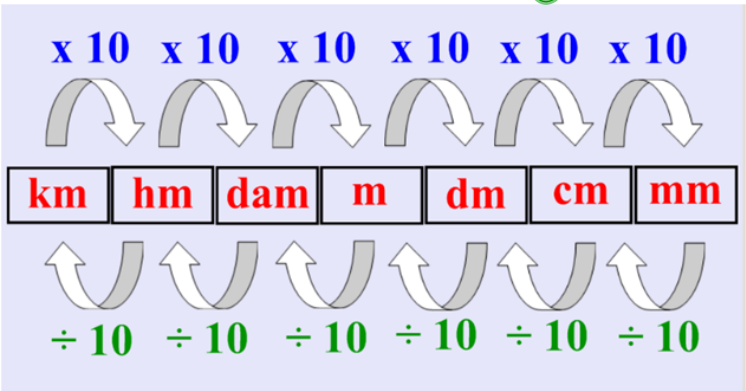
The SI units most commonly used:

-Distances (kilometres or km)
-Fuel economy (L/100km)
-Meat or fish (kg)
-Milk or juice (L)
-Cloth (metres or m)
-Temperature (°C)
-carpet lengths (m)
-Volumes of beakers in science class (100mL or 200mL)

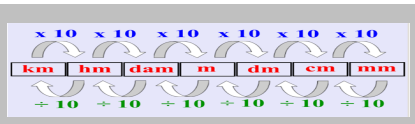
UNIT PREFIXES:

k	:	kilo
h	:	hecto
da	:	deca
d	:	deci
c	:	centi
m	:	milli

236m = 2.36 hm



*** the m stands for meters, but can be exchanged for a g (which stands for grams) and an L (which stands for litres)



SI Exercise

A) 3 metres = _____ centimetres

B) 40 litres = _____ decilitres

C) 600 milligrams = _____ grams

D) 5 kilometres = _____ hectometres

E) 70 centimetres = _____ metres

F) 900 decilitres = _____ decalitres

G) John's pet python measured 600 centimetres long. How many metres long was the snake?

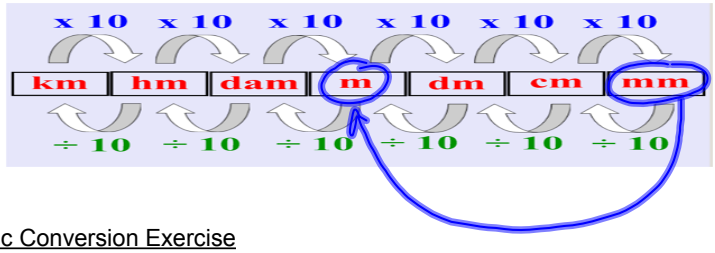
H) Faith weighed 5 kilograms at birth. How many grams did she weigh?

I) Jessica drank 4 litres of tea today. How many decilitres did she drink?

Monday, April 24

*If you did not write your test on Thursday or pass in your assignment you need to come see me asap. I will be in my room at lunch hour!

Today:
-Checking answers to the assigned worksheet
-Notes/Examples of Imperial system
-Practice questions



Metric Conversion Exercise

1) 60 mm = 0.060 m

2) 579 000 000 mm = _____ km

3) 0.934 cm = _____ mm

4) 0.6921 m = _____ km

5) 20 800 000 cm = _____ km

6) 758.0048 m = _____ mm

7) 21 200 cm = _____ m

8) 0.0000072 km = _____ mm

9)172.14 cm = _____ m

10) 9.000658 km = _____ cm

11) 0.00004 km = _____ m

12) 315 m = _____ mm

13) 161 000 000 mm = _____ km

14) 809.008288 km = _____ cm

15) 390 cm = _____ mm

16) 57 700 000 cm = _____ km

17) 863.05 m = _____ mm

18) 46.3 mm = _____ km

19) 203 m = _____ cm

20) 6940 mm = _____ cm

Metric Conversion Exercise

1) 60 mm = 0.060 m

2) 579 000 000 mm = 579 km

3) 0.934 cm = 9.34 mm

4) 0.6921 m = 0.000692 km

5) 20 800 000 cm = 208 km

6) 758.0048 m = 758004.8 mm

7) 21 200 cm = 212 m

8) 0.0000072 km = 7.2 mm

9)172.14 cm = 1.7214 m

10) 9.000658 km = 900658 cm

11) 0.00004 km = 0.04 m

12) 315 m = 315000 mm

13) 161 000 000 mm = 161 km

14) 809.008288 km = 809008288 cm

15) 390 cm = 3900 mm

16) 57 700 000 cm = 577 km

17) 863.05 m = 863050 mm

18) 46.3 mm = 0.0000463 km

19) 203 m = 20300 cm

20) 6940 mm = 694 cm